## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

## (19) World Intellectual Property Organization International Bureau





(43) International Publication Date 8 April 2004 (08.04.2004)

PCT

## (10) International Publication Number WO 2004/029097 A 1

(51) International Patent Classification<sup>7</sup>: 31/00, C08J 3/14, C08K 5/092

C08B 3/00,

(74) Agent: SEPPO LAINE OY; Itämerenkatu 3 B, FIN-00180 Helsinki (FI).

(21) International Application Number:

PCT/FI2003/000700

(22) International Filing Date:

25 September 2003 (25.09.2003)

(25) Filing Language:

Finnish

(26) Publication Language:

English

(30) Priority Data:

20021730

27 September 2002 (27.09.2002) F

(71) Applicant (for all designated States except US): VALTION TEKNILLINEN TUTKIMUSKESKUS [FI/FI]; Vuorimiehentie 5, FIN-02150 Espoo (FI).

(72) Inventors; and

(75) Inventors/Applicants (for US only): MIKKONEN, Hannu [FI/FI]; Puistokuja 12 A, FIN-05200 Rajamäki (FI). TARVAINEN, Maarit [FI/FI]; Saarijärventie 11 A, FIN-70460 Kuopio (FI). PELTONEN, Soili [FI/FI]; Sointulantie 33, FIN-05200 Rajamäki (FI). PARONEN, Timo, Petteri [FI/FI]; Kipinäkatu 32, FIN-70620 Kuopio (FI). (81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: POLYMER SOLUTION AND DISPERSION AND A PROCESS FOR THE PREPARATION THEREOF

(57) Abstract: A polymer dispersion or solution containing a hydrophobic polysaccharide, which is dispersed or dissolved in liquid phase, and palsticizer composition of the polysaccharide, whereby at least 10 % by weight of the plascitizer composition is formed from alkenyl succinic anhydride. The invention also relates to the preparation of polymer dispersions and solutions and to the films and coatings produced from them. The dispersions according to the invention are stable, and coating with excellent film-forming properties can be prepared from them.



